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ABSTRACT

This study examined factors that predict a general education teacher's efficacy beliefs for instructing students with learning and behavior problems and whether a teacher's perceived efficacy has a stronger direct effect on reported success than other variables. One hundred twenty-eight second grade teachers completed a survey instrument designed to examine the following variables: preservice and inservice preparation, administrative support, class size, socioeconomic status, collegiality, and teacher efficacy. Path analysis techniques were used to test the initial theoretical model. Reduced models were retested and compared to previous models to develop a final model. As hypothesized, teacher's efficacy beliefs had the strongest direct effect on reported success. Collegiality with special education teachers and quality inservice in special education also directly affected teachers' reports of success, but to a lesser degree. However, general education teachers who experienced better collegial relationships with general education peers and students with higher socioeconomic status were less likely to report success in instructing students with learning and behavior problems. Also, quality of preservice preparation had a strong direct effect on teachers' efficacy beliefs as did collegiality with special education teachers. Finally, quality of special education inservice and principal support for mainstreaming students with disabilities positively affected collegiality with special education teachers. (Contains 23 references.) (DB)

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RESEARCH BULLETIN

The Influence of Teachers' Efficacy Beliefs on Perceived Success in Mainstreaming Students With Learning and Behavior Problems: A Path Analysis

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F.E.R.C. NOTES ON THIS BULLETIN

Probably the most major problem of student placement at the present, at least to many classroom teachers, is the lack of background in teaching special needs students.

While the philosophy is educationally and socially sound, the best practices in mainstreaming are still being defined. Professors Brownell and Pajares have conducted a meaningful study in this area which should assist to define good practice in mainstreaming special needs students.

Charlie T. Council
Executive Director
F.E.R.C.

The Influence of Teachers' Efficacy Beliefs on Perceived Success in Mainstreaming Students with Learning and Behavior Problems: a Path Analysis

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INFLUENCE OF TEACHERS' EFFICACY BELIEFS

Educators and researchers assert that teachers' beliefs may be the prominent determinants and predictors of teaching practices (see Pajares, 1992). Especially notable in studies of teachers beliefs is the concept of teachers' efficacy beliefs, that is, teachers' situation-specific "perceptions of their own teaching abilities" (Ashton & Webb, 1986, p. 4). Recent research findings suggest that these self-perceptions strongly influence a myriad of teachers' behaviors, including their classroom management and instructional strategies. Albert Bandura's (1986) social cognitive theory, from which the construct of self-efficacy is drawn, suggests that individuals will pursue activities and situations in which they feel competent and will avoid situations in which they doubt their capability to perform successfully (see also Bandura, 1993; Ashton & Webb, 1986). For example, classroom teachers who believe they can successfully instruct students who have learning or behavioral problems are more likely to include such students in their classroom than are teachers who doubt their ability to instruct or motivate these students.

Teachers' self-efficacy is a context-specific judgment of capability in a particular instructional endeavor. Although researchers have investigated the relationship between teachers' efficacy beliefs and various teaching outcomes, few studies have examined the relationship between general education teachers' efficacy beliefs and outcomes related to instructing students with disabilities. At a time when inclusion figures prominently in our instructional agenda, this is an important omission. In this study, we were concerned with teachers' judgments of their ability to successfully educate students who have diverse learning and behavioral difficulties. Drawing on social cognitive theory and previous findings from studies of teachers' efficacy beliefs (Woolfolk & Hoy, 1990; Woolfolk, Rosoff, & Hoy,2 1990), we posit that general classroom teachers' efficacy beliefs for instructing students with learning and behavior problems will influence their perceptions of success in instructing such students in mainstream classrooms.

Two problems have plagued research in the area of teachers' efficacy beliefs. The first problem deals with the assessment of the efficacy judgments in question (see Pajares, in press). Bandura (1986) warned that efficacy beliefs are *context-specific judgments* of capability to perform *specific* tasks. Consequently, the efficacy beliefs assessed must always be in concert with the criterial task with which such judgments will be made. Unfortunately, teachers' efficacy beliefs have generally been assessed in broad terms and operationalized as global judgments of capability to instruct "all" children across contexts and situations. Measures such as that designed by Gibson and Dembo (1984) have been used to this end. Because the criterial task we propose to assess, perceptions of success in educating students with learning and/or behavioral difficulties in mainstream classrooms, should theoretically be related to judgments of confidence to teach such

students, the appropriate efficacy beliefs to tap deal with judgments of ability to instruct and manage such students. In this study, we created an instrument geared to this specific end.

The second problem deals with the manner in which data has been analyzed in research on teachers' efficacy beliefs, as well as with the control variables included in the analyses. With the exception of Bandura (1993), all studies have been correlational in nature, and consequently, no causal inferences have been possible. To remediate this problem, we used path analysis techniques to test a model based on the tenets of social cognitive theory and key results from prior research. We posited that efficacy beliefs should mediate the effects of other independent variables on general education teachers' reported success in instructing students with behavior and learning problems.

Specifically, we used path analysis techniques to (a) identify the factors that be predict a general education teacher's efficacy beliefs for instructing students with learning and behavior problems, and (b) determine whether a general education teacher's perceived efficacy to instruct such students has a stronger direct effect on reported success than other variables hypothesized to influence this outcome.

Conceptual Framework

Understanding the relationship between general education teachers' efficacy beliefs to instruct and manage students with learning and behavioral difficulties and their perceptions of success in educating such students is important to inclusion efforts. Social cognitive theory maintains that efficacy beliefs influence the choices people make, and the effort and perseverance with which they engage in tasks (Bandura, 1986). This theory holds true when researchers examine the relationship between teachers' efficacy beliefs and their instructional practices and orientation toward the educational process. Although they measured teachers' efficacy beliefs broadly, Gibson and Dembo (1984) found that teachers with high efficacy beliefs provided students who had difficulty learning with the additional help needed to succeed. In contrast, teachers with low efficacy beliefs more readily gave up on students who could not get quick results. Additionally, teachers with low efficacy beliefs tend to hold a custodial orientation that takes a pessimistic view of students' motivation, emphasizes rigid control of classroom behavior, and relies on extrinsic inducements and negative sanctions to get students to study (Woolfolk & Hoy, 1990; Woolfolk, Rosoff, & Hoy, 1990). Further support for the hypothesis that teachers with high efficacy beliefs engage in effective instructional practices is demonstrated by research indicating a positive relationship between teachers' efficacy beliefs and students' achievement and efficacy beliefs about academic performance (Ashton & Webb, 1986; Midgley, Feldlaufer, & Eccles, 1989).

In studies of general educators working with students with disabilities, researchers have reported that teachers who feel confident in their ability to teach students with learning and behavior difficulties are more likely

than their peers with lower efficacy beliefs to engage in effective instructional practices (Bender & Ikechukwu, 1989). Also, general education teachers with high efficacy beliefs are judged by their peers as being more capable of instructing students with behavior disorders (Landrum & Kaufman, 1992). Consequently, we posit that teachers with higher efficacy beliefs will persevere more in creating accommodations for students with learning and behavior problems or disabilities and, consequently, report greater success in educating these students.

A number of factors affect teachers' judgments of their ability to teach students with learning and behavior difficulties (see figure 1). Related research findings suggest that these factors may include the support of the building principal, collegiality, class size, preservice and inservice preparation, and students' socioeconomic status. A brief review of key findings related to these variables follows.

Support from the building principal. Schools that have a high degree of consensus about goals for student learning are those in which the principal interacts with teachers to define instructional goals, to select and socialize new recruits, to determine policies of student behavior, and to develop criteria for teacher evaluation (Rosenholtz, 1989). Principals who assist faculty in their collaborative efforts and share decision-making power with teachers are better able to assist teachers in dealing with the uncertainty of their work (Nias, Southworth, & Yeomans, 1989; Rosenholtz, 1989). Principals who frequently evaluate teachers, identify specific improvement goals, and monitor progress towards those goals create more learning opportunities for teachers, which, in turn, positively affects student achievement (Rosenholtz, 1989). Ashton and Webb (1986) have reported that the role of the principal was instrumental in the development of teachers' efficacy beliefs. Teachers who report receiving the necessary support from building principals and colleagues feel confident in their ability to teach students in low socioeconomic schools (Yee, 1990). Thus, it is logical that general education teachers who receive support from building principals to do their job, particularly support for mainstreaming students with disabilities, will exhibit more efficacious beliefs about instructing students with disabilities than their peers who are unsupported.

Collegiality. In schools where teachers receive support from building administrators, teachers frequently interact about educational goals. As a result of these collegial interactions, teachers are more likely to feel confident in dealing with the uncertainties of their work because they have more opportunities to learn as a result of sharing expertise with colleagues and seeking advice from colleagues (Ashton & Webb, 1986; Rosenholtz, 1989). Moreover, opportunities to collaborate with colleagues positively correlate with general educators' satisfaction and commitment to the workplace (Rosenholtz, 1989; Yee, 1990). Schools in which teachers report high commitment also have greater gains in student achievement in reading and math (Rosenholtz, 1989). Consequently, when general education teachers

are successful in collaborative relationships with special education colleagues, they should perceive themselves as capable of instructing students with disabilities.

Class size. Teachers overwhelmed with high numbers of students with diverse learning problems feel unable to meet students' instructional needs, resulting in a lower sense of efficacy and job commitment (Yee, 1990). Bender and Ikechukwu (1989) found a negative correlation between class size, instructional strategies used, and teacher efficacy among general education teachers mainstreaming students with disabilities.

Socioeconomic status. In the early 1960s, John Risk eloquently documented the low expectations teachers hold for students from low income backgrounds. Since that time, Rosenholtz (1985, 1989) and Litt and Turk (1985) found that teachers in low socioeconomic urban settings felt they could make little contribution to student growth and development and subsequently became less involved with students, were absent more frequently, and were less committed to the workplace.

Preservice and inservice preparation. The number of special education courses general education teachers take or the amount and quality of inservice experiences they receive increases their positive perceptions of educating students with disabilities in the general education classroom (Larrivee, 1981; Stephens & Braun, 1980, Stoler, 1992). Specifically, general education teachers who took more special education courses were more likely to indicate using effective instructional strategies and to have higher efficacy beliefs than peers who took less course work (Bender & Ikechukwu, 1989). Further, general education teachers who have received inservice training to work with students with learning disabilities exhibit greater job satisfaction in working with these students than those who have not (Lobosco & Newman, 1992).

Methodology

Sample. We randomly selected 200 second grade teachers from a large Southeastern County School District to participate in this study. All sampled teachers were employed full-time by the district in a general education classroom. Second grade teachers were selected because many students with mild disabilities are served in integrated settings in the primary grades.

Instrument. Our survey instrument, *Working with Diverse Students: The General Educator's Perspective* was designed to address the variables detailed in the conceptual framework (see figure 1). All variables with the exception of class size and socioeconomic status were measured using likert scale items. Variables were measured using 4 to 12 items per variable. Table I includes a sample item from each scale and reports how many items were in each scale. The minimum and maximum score each teacher could receive on a particular scale is also reported.

The survey instrument was pilot-tested with 12 elementary school teachers in Florida. In addition to responding to the survey and providing written feedback, 3 field test participants were selected for follow-up inter-

views to assess their interpretation of individual items and solicit their feedback on the instrument.

After pilot-testing the instrument, the large-scale mail out was conducted. Survey instruments were sent to each of the 200 identified teachers along with stamped return envelopes. Three follow-up mailings and several telephone calls were used to increase the response rate.

Response rate. An overall response rate was calculated using Dillman's formula (1978). Of the 200 identified respondents, one respondent was removed from the sample because she had moved. Of the remaining 199 respondents, 128 returned their surveys for an overall response rate of 64.3%.

Results

Path analyses techniques were used to test the initial theoretical model (see Figure 1). Reduced models were retested and compared to previous models (Bentler, 1987, 1989, 1990; Bentler & Chou, 1987) to develop the model outlined in Figure 2.

Path analyses techniques were then used to test the model presented in Figure 2. The Goodness of Fit Indices (see Bentler, 1987, 1989, 1990; Bentler & Chou, 1987) were used to determine how well the respondents' answers fit the final model. These indices are considered satisfactory, and, thus, we concluded that there was a strong fit between our respondents' data and the final model.

Four separate relationships were also tested using path analyses techniques. In the first relationship, the direct effects of teacher efficacy beliefs, collegiality with special education teachers, quality of special education inservice, collegiality with general education teachers, and socioeconomic status of students on reported success in teaching students with disabilities were analyzed. As hypothesized, teachers' efficacy beliefs had the strongest direct effect on reported success with higher efficacy beliefs resulting in increased reports of success. Collegiality with special education teachers and quality inservice in special education also directly affected teachers' reports of success but to a lesser degree. Teachers who experienced more and higher quality interactions with their peers reported greater success as did those teachers who received quality inservice in special education. Collegiality with general education teachers and socioeconomic status also directly affected teachers' reports of success, but the direction of the relationship was negative. That is, general education teachers who experienced better collegial relationships with general education peers and students with higher socioeconomic status were less likely to report success in instructing students with learning and behavior problems.

For the second relationship, the direct effects of collegiality with special education teachers, collegiality with general education teachers, and quality of preservice preparation in special education on teachers' efficacy beliefs were analyzed. Quality of preservice preparation had the strongest direct effect on teachers' efficacy beliefs. The more teachers perceived their preservice education as useful in helping them teach and manage students

with disabilities the more likely they were to experience success in working with such students. Collegiality with special educators and general educators also had a direct effect on teachers' efficacy beliefs. Thus, teachers who collaborate more, particularly with special education teachers, are likely to see themselves as capable of handling students with learning and behavior problems.

In the third relationship, quality of special education inservice and administrator support for mainstreaming students with disabilities had direct effects on collegiality with special education teachers. Teachers who participated in quality inservice and received assistance from their building administrator to mainstream students with disabilities experience more collegial interactions with their special education peers.

Finally, the direct effects of quality of special education inservice and general support from the building administrator on collegiality with general education teachers were analyzed. Both quality of special education inservice and general support from the building administrator directly affected collegiality with general education teachers. Teachers who participated in higher quality inservice preparation and received general support from their principal to do their job indicated greater collaboration with general education colleagues.

Discussion

General education teachers who report success in instructing students with learning and behavior problems may be more willing to include these students in their classroom and persist in educating those students than teachers who feel less successful. Results of our study suggest if teacher educators and school district administrators are concerned with designing and implementing successful inclusion efforts, they must acknowledge the importance of creating educational experiences and supports that foster a general education teacher's efficacy beliefs and success in teaching students with diverse learning and behavioral needs.

According to our respondents, general education teachers perceive their efforts to include and teach students with disabilities as more successful when they have participated in inservice programs that include information about: (a) the needs of students with disabilities, (b) curricular and instructional adaptations for students, and (c) behavior management techniques for students with disabilities. Further, general education teachers feel confident that they can successfully instruct and manage students with learning and behavioral difficulties when they participate in preservice course work that addresses similar components. Our findings stand in contradiction to previous studies suggesting that infusing special education information into teacher education programs is less effective than inservice preparation in improving teacher attitudes (see for review, Scruggs & Mastropieri, 1996). Although our research measured efficacious beliefs and not attitudes, one could reasonably assume that they would be positively correlated. The differences in teachers' efficacy and perceived quality of

their special education course work may also suggest that all teacher preparation programs are not created equal. A comprehensive survey of Institutions of Higher Education (IHEs) lends validity to this proposition (Jones & Messenheimer-Young, 1989). The nature of special education course work offered in general education teacher preparation programs surveyed varied widely. For instance, 98% of IHEs who offered course work in Mainstreaming addressed curricular adaptations for students with disabilities as opposed 70% of IHEs who offered course work in Exceptionalities.

Future research needs to identify differences in special education preservice preparation for general educators and the relationship of various program elements to general education teachers' efficacy beliefs. Findings from our research suggest that preservice preparation programs must redesign their programs in instruction and curriculum to include course work and/or experiences in special education. The recent trend in teacher education institutions to unify special and general education preparation programs (Blanton, Griffin, Winn, & Pugach, 1997) should have an interesting influence on the efficacy beliefs of classroom teachers. Given our results, we anticipate that graduates from unified preparation programs will be more confident of their ability to teach students with disabilities and report greater success in doing so. Further, our results suggest that not all inservice programs offered in special education are equally helpful to teachers. Because the literature is replete with studies delineating the components of effective staff development (e.g., Englert & Tarrant, 1995; McLaughlin & Marsh, 1990), future research examining teachers efficacious beliefs should document the types of staff development programs teachers participate in and the ways in which their beliefs change as a result.

Moreover, for general education teachers to perceive themselves as capable of teaching students with disabilities and experience success in doing so, they must receive support to mainstream students with disabilities from their building administrator. General supports to do their job, such as the principal's assistance to solve problems they face, are insufficient to foster collegiality with their special education colleagues. Because collegiality with special education colleagues directly predicts general education teacher efficacy and reported success, it is important that building administrators be able to foster this type of collegiality in their environment. Many building principals, however, acquire little knowledge of special education through professional certification programs (Valesky & Hirth, 1992). Most educational leadership programs do not include course work in special education, and therefore, building principals may have little understanding of students with disabilities rights to be educated in less restrictive environments or how to provide assistance to teachers attempting to serve these students in mainstream environments. Clearly, licensure for building principals needs to be revised to accommodate this important omission. Meanwhile, districts must provide professional development experiences to building administrators that improve their ability to assist

general education teachers in mainstreaming students with disabilities into their classroom.

Results from our study also question the conclusions of earlier researchers who studied general education teacher attitudes toward including students with disabilities in their classroom (see for a review, Scruggs & Mastropieri, 1996). These researchers question the viability of inclusion because many general education teachers feel unprepared and unable to include students with disabilities in their classroom. Our findings, however, suggest that general educators' beliefs can be changed and successful experiences increased if the proper supports and preparation for mainstreaming are provided. Because the provision of these supports and preparation can be made available to general education teachers and building principals, arguments that question the viability of inclusion based on general education teachers' perceptions of inclusion seem less powerful. It is logical that if teachers can be assisted to experience success in educating students with disabilities, that they will be more wilting to include these students in their classroom.

At this point in time, it seems appropriate that we shift away from studies documenting teachers attitudes and try to determine more specifically the types of preparation experiences and supports that general education teachers need to feel confident to serve students with disabilities. Finally, we need to determine if teachers who hold more efficacious beliefs are more likely to engage in more effective educational practices than their less efficacious peers. Limited research suggests that this may be the case, however, researchers in those studies used questionable measures of efficacy beliefs, and they did not directly observe teachers actual practices nor their effects on students (Bender & Ikechukwu, 1989; Landrum & Kaufman, 1992). Thus, further research examining the relationship between teachers' efficacy beliefs, instructional practices, and student achievement is warranted.

References

Ashton, P. T., & Webb, R. B. (1986). Making a difference: Teachers' sense of efficacy and student achievement. New York: Longman.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. New York: Prentice Hall.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. Educational Psychologist, 28, 117-148.

Bender, W. N., & Ikechukwu, C. U. (1989). Instructional strategies in mainstream classrooms: Prediction of the strategies teachers select. Remedial and Social Education, 10, 23-30.

Blanton, L. P., Griffin, C. C., Winn, J. A., & Pugach, M. C. (1997). Teacher education in transition: Collaborative programs to prepare general and special educators. Denver, CO: Love Publishing Company.

Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. Journal of Educational Psychology, 76, 569-592.

Jones, S. D., Messenheimer-Young, T. (1989). Content of special education courses for preservice regular education teachers. Teacher Education and Special Education, 12(4), 154-159.

Landrum, T. J., & Kaufman, J. M. (1992). Characteristics of general education teachers perceived as effective by their peers: Implications for inclusion of children with learning and behavioral disorders. Exceptionality, 3, 147-163.

Larrivee, B. (1981). Effect of inservice training intensity on teachers' attitudes toward mainstreaming. Exceptional Children, 48, 34-39.

Litt, M. D., & Turk, D. C. (1985). Sources of stress and dissatisfaction in experienced high school teachers. Journal of Educational Research, 78, 178-185.

Lobosco, A. F., & Newman, D. L. (1992). Teaching special needs populations and teacher job satisfaction: Implications for teacher education and staff development. Urban Education, 1, 21-31.

McLaughlin, M. W., & Marsh, D. D. (1990). Staff development and school change. In A. Liebennan (Ed.), Schools as collaborative cultures: Creating the future now. New York: Falmer Press.

Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Change in teacher efficacy and student self- and task-related beliefs in mathematics during the transition to junior high school. Journal of Educational Psychology, 81, 247-258.

Pajares, F. (1992). Teachers beliefs and educational research: Cleaning up a messy construct. Review of Educational Research, 62, 307-332.

Rist, R. C. (1973). The urban school: A factor for failure. Cambridge: M.I.T. Press.

Rosenholtz, S. J. (1985). Effective schools: Interpreting the evidence. American Journal of Education, 93, 352-388.

Rosenholtz, S. J. (1989). Teachers' workplace: The social organization of schools. New York: Longman.

Scruggs, T. E., & Mastropieri, M. A. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis. Exceptional Children, 63(l), 59-74.

Stephens, T. M., & Braun, B. L. (1980). Measures of regular classroom teachers' attitudes toward handicapped children. Exceptional Children, 46, 292-294.

Stoler, R. D. (1992). Perceptions of regular education teachers toward inclusion of all handicapped students in their classrooms. The Clearinghouse, 66, 60-62.

Valesky, T. C., & Hirth, M. A. (1992). Survey of the states: Special education knowledge requirements for school administrators. Exceptional Children, 58(5), 399-405.

Woolfolk, A. E., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. Journal of Educational Psychology, 82, 81-9 1.

Yee, S.M. (1990). Careers in the classroom: When teaching is more than a job. New York: Teachers College Press.

Figure 1: Conceptual Model of Factors Affecting Reported Success

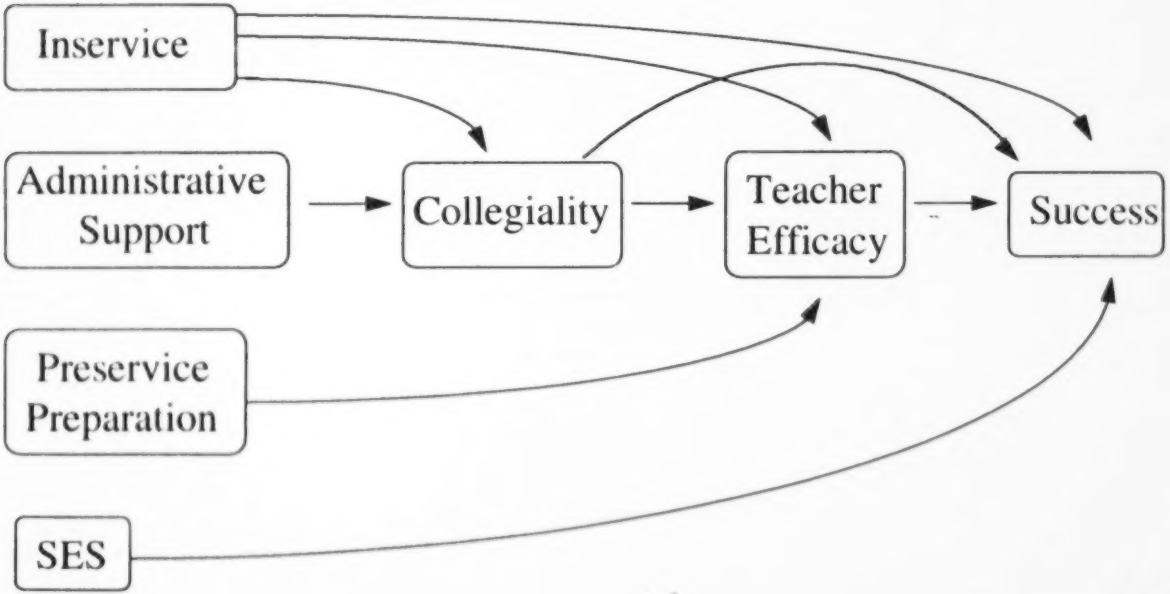

Figure 1

Table 1: Scales, sample items, coding of item, possible range of responses, and cronbach alpha for each scale.

Scales and Sample Items	Coding	Range	Cronbach Alpha
Reported Success I have successfully taught students with learning problems	Sum of 4 items on 6 point likert scale were 6 = agree; 1 = disagree	4-24	.81
Teachers' Efficacy Beliefs Considering your current instructional situation and teaching responsibilities, how much can you do to keep students with behavior problems on task with difficult assignments?	Sum 11 items on 6 point likert scale were 6 = a great deal; 1 = nothing	11-66	.90
Quality of Preservice Preparation From participating in university course work, I have the ability to manage the behavioral difficulties of students with disabilities	Sum of 4 items on a 6 point likert scale were 6 = agree; 1 = disagree	4-24	.94
Quality of Inservice Preparation I have actively participated in staff development programs in my school or district that focus on adapting curriculum for students with disabilities	Sum of 4 items on a 6 point likert scale were 6 = agree; 1 = disagree	4-24	.96
General Support: Building Administrator My building administrator provides me with current information about teaching/ learning	Sum of 10 items on a 6 point likert scale were 6 = agree; 1 = disagree	10-60	.95
Special Education Support: Building Administrator My building administrator supports general educators in mainstreaming students with disabilities	Sum of 2 items on a 6 point likert scale were 6 = agree; 1 = disagree	2-12	.91
Collegiality with Special Education Special education teachers in this school work with me to mainstream students	Sum of 2 items on a 6 point likert scale were 6 = agree; 1 = disagree	1-12	.89

Table 1 - continued

Collegiality with General Education Special education teachers in this school work with me to mainstream students	Sum of 9 items on a 6 point likert scale were 6 = agree; 1 = disagree	9-54	.76

Figure 2: Final Model of Factors Affecting Reported Success